

Daily GLOWBUGS

Digest: V1 #31

via AB4EL Web Digests @ SunSITE

Purpose: building and operating vacuum tube-based QRP rigs

[AB4EL Ham Radio Homepage @ SunSITE](#)

%%%% GlowBugs %%%%% GlowBugs %%%%% GlowBugs %%%%% GlowBugs %%%%%

Subject: glowbugs V1 #31

glowbugs

Wednesday, May 14 1997

Volume 01 : Number 031

Date: Tue, 13 May 1997 08:00:20 -0800

From: "Kenneth G. Gordon" <keng@uidaho.edu>

Subject: Re: AN/GRC-109 Arrived

> Greetings All -

>

> My GRC-109 arrived from Fair Radio this afternoon. Recevier is s/n 038

> and the transmitter is s/n 3. Both are old, but in reasonable shape.

> The transmitter case looks like it has been repainted by a not so

> interested amateur. Haven't fired them up yet as will getting an AC

> adaptor plug tomorrow and have got to figure out some kind of

> speaker/audio amp or find a set of HiZ headphones.

>

> Any suggestions on how to handle the audio thing?

>

Fair Radio has some neat little speakers in metal boxes which originally were used in military gear. They have a built-in 600 ohm to 8 ohm transformer and terminate in a 1/4 inch 'phone plug.

The one I have works beautifully with my R-1004.

> Hope to see you on 3579 Kcps.

>

> 73's Bob W7VZX

I know a W7DZX from Spokane, Wa. Do you, by any chance, know him?

Date: Tue, 13 May 1997 09:08:55 -0700

From: Robert Friess <rfriess@ix.netcom.com>

Subject: Fair Radio Out of GRC-109

After all of the traffic over the merits of the GRC-109, I decided that I should have one. I just got off the phone with Fair Radio and they tell me that they are out of the receivers. Is there another source? Does someone have one that they no longer want?

73,

Bob, N6CM

Date: Tue, 13 May 1997 09:50:19 -0700 (MST)
From: Jeff Duntemann <jeffd@coriolis.com>
Subject: More on the GRC-109 (was: AN/GRC-109 serial #72)

At 05:39 PM 5/12/97 -0700, WB8HUR wrote:
>Hi Jeff,
>
>Tell me about the GRC-109 or is it the GRC-109A?
>
>Is this basically what you got from Fair Radio?
>
>Radio Set, Special Forces
>3-22MHz CW TX
>3-24 Mhz AM/CW RX
>Consists of: T-784/GRC transmitter
>R-1004/GRC receiver
>PP-2685 AC power supply

Close. It's the GRC-109; no evidence of an "A" qualifier. I tried to order the PP-2685 (the "small" power supply) but they were gone. So I ordered the big one, the PP-2684, which was actually a little cheaper.

Someone else asked what Fair's prices were; the receiver was \$59.50, the transmitter was \$24.95, and the PS was \$25. I bought a copy of the manual (reasnoable quality loose Xerox sheets on both sides) for \$10.

Now, I called them again this morning to order a couple of other things, including the LS-166 speaker someone else here mentioned yesterday, and tried to order another receiver for my nephews. Dey gone, guys. Must be the power of the Internet... I didn't ask about the transmitter.

Anyway. Last night I powered up the receiver, and found that it worked beautifully on the two lower bands, and got no signal on the highest band. (12-24 Mc.) So I have to open 'er up and poke a bit. There was plenty to hear on the low end of that range, as I verified on the Icom.

One interesting issue with the receiver is that I don't see any trace of AVC in the schematic (unless it's done some weird way I don't recognize), and the lack was apparent in scanning the bands. I had a 190' long wire right to the antenna post; I did not connect the transmitter at all last night so I didn't check the business with the T/R switching diodes reducing receiver sensitivity.

The receiver is hard to tune for SSB, but it's a snap for CW and AM BC. The bands were full of signals and the 80m noise level quite low for this time of year. Lots of 40m novice traffic in and among all the Voice of

Nowhere Especially Important SWBC stations.

One side note of interest: The manual indicated you could run the receiver off a BA-48 dry battery pack. Fair sells good ones for \$14.95 and "weak" ones for \$4. I ordered a weak one, solely for the connector on the top of the battery. That'll allow me to put together a more compact power supply.

On another battery note, Fair sells BA-314 battery packs (67.5V) for only \$1.25. Cheap enough to play with for regen receivers; the only way I EVER got all the hum out of a regen was to run it on batteries. (These may or may not be very "live," as Fair doesn't indicate and I haven't bought any.)

I hope to get the transmitter going this weekend. This will be more work, as there was a fair amount of green corrosion in the transmitter connector socket on the power supply. But overall, I'm quite happy with what I got, especially if I can bring the high band back to life without a lot of bloodshed. I enjoy 15 meter CW for no good reason other than, perhaps, the lack of crowding and SWBC, and haven't done it for a couple of years. As the sun breaks out again this should get better and better.

- --73--

- --JD--

Date: Tue, 13 May 1997 09:57:52 -0700 (MST)
From: Jeff Duntemann <jeffd@coriolis.com>
Subject: Re: AN/GRC-109 Arrived

At 08:28 PM 5/12/97 -0700, Bob Rolfness wrote:

>Greetings All -

>

>My GRC-109 arrived from Fair Radio this afternoon. Receiver is s/n 038

>and the transmitter is s/n 3. Both are old, but in reasonable shape.

>The transmitter case looks like it has been repainted by a not so

>interested amateur. Haven't fired them up yet as will getting an AC

>adaptor plug tomorrow and have got to figure out some kind of

>speaker/audio amp or find a set of HiZ headphones.

>

>Any suggestions on how to handle the audio thing?

I tested my receiver last night with both 2000 ohm cans and a 600 ohm military headset. Both worked fine. Not much output into a modern 8 ohm headset. I ordered the LS-166 speaker from Fair for my unit; it has a 600:8 ohm output transformer. If speaker output is low I may build a simple 1-stage audio power amp inside of it.

The paint is flaking off my power supply box, revealing older paint underneath. This might have been a "refurbishing" job; don't assume it was an amateur...

- --73--

- --Jeff Duntemann KG7JF
Scottsdale, Arizona

Date: Tue, 13 May 1997 13:41:21 -0400 (EDT)

From: rdkeys@csemail.cropsci.ncsu.edu

Subject: BA/GB Roundtable Funzies --- Tuesday and Wednesday Nites

OK, since there seems to be some interest in them thar 80M glowingboxen hows abouts we plys de ol' 80M ethers Tuesday and Wednesday nites, anytime after dark, on de ol 3579R545 +-QRM QRG. I will put the AN/SRT-14 and Big Bertha Radiomarine on the QRG, and sees abouts a'firin' up ol' Grandma Hartley and Twinnie Triode Tickler if anyone shows up.

Here be da time ta fires ye up yer spyboxenbottleburners an' rite fine breadboards an' da likes.....

I will make a round of calls each 15 minutes for a 2x2 round of calling, an' sees wats me can sees an' 'ears wats me can 'ears.

QTR 0000-0600Z (or whenevers ye timbers gets horizontil)

QRG 3579R500KHZ (in/around/over the rittyrattyebingbang stuff)

CALL CQ BA CQ BA DE <yourcall> <yourcall> K

73/ZUT DE NA4G/Bob UP

Date: Tue, 13 May 1997 10:32:26 -0700

From: Walt Turansky <turansky@xroads.com>

Subject: TV-7 Settings for HF-100

Gang,

I was given an HF-100 75w transmitting triode and a NC-800 neutralizing condenser that I plan to use in a 150 watt or so amplifier (1938 Handbook design) for my 80m Hartley. Does anyone know the TV-7 settings to test this tube?

73 de N7QFN

Walt

Date: Tue, 13 May 1997 16:20:10 -0400 (EDT)

From: rdkeys@csemail.cropsci.ncsu.edu

Subject: Roundtable for CW Boatanchors --- interested? (fwd)

Forwarded message:

I been a baaaad baaaad boy, today..... I let out our secret, in the hopes of trying to bolster up some more interest in the ``BA/GB Roundtable'' that has been a bit slack, lately.

Hope you folks won't be too 'onery at me.

It was addressed specifically at the rec.radio.amateur.boatanchors group, but many of them seem to share like interests, and perhaps a few cw types will join in on the roundtables, with their treasured glowbottleburners.

73/ZUT DE NA4G/Bob UP

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> From rdkeys@unity.ncsu.edu Tue May 13 16:09:25 1997
> From: rdkeys@unity.ncsu.edu
> Date: Tue, 13 May 1997 15:53:31 -0400 (EDT)
> Message-Id: <199705131953.PAA02854@cc05du.unity.ncsu.edu>
> Newsgroups: rec.radio.amateur.boatanchors
> Subject: Roundtable for CW Boatanchors --- interested?
> Organization: North Carolina State University
> Sender: rdkeys@unity.ncsu.edu
> Apparently-To: <rdkeys@csemail.cropski.ncsu.edu>
>
> OK, we have had a lot of interest here, on the r.r.a.b group for a
> few weeks. I will open up an invitation to all the CW types aboard
> the watch, for a roundtable on 160/80/40M, that is open to all the
> Boatanchorite types, if you have an interest.
>
> There have been, for several years, a number of us ``Boatanchor''
> and ``Glowbug'' types (Boatanchorites you know what they are, Glowbuggites
> are folks that like to build boatanchors from scratch, the old fashioned
> way), on the net, in closed lists. We meet almost every evening on one
> of three frequencies, for a goodly time of old fashioned brass pounding.
> Since I am the fellow/fool/idiot/nut/pick-one, who started it (or I suppose
> I lay most claim thereto, with the support of a few other diehards), I will
> take the responsibility for opening the ``roundtable'' up to all CWist
> Boatanchor types that wish to join in (FYI, a CWist is a person wat likes
> CW as a profession, or a hobby, kindof like ol' Duke Wayne as the Shootist).
>
> So, if you have an interest, and a boatanchor to suit, and some 'semblance
> of a fist, you are most welcome to join in.
>
> QTR 0000/0100/0200Z (basically just at sunset or a little before/after)
> QRG 7050KHZ
>
> QTR 0200/0300/0400/0500Z (basically anytime after dark)
> QRG 3579R545KHZ
>
> QTR 0200/0300/0400/0500/0600Z (basically any wintertime after dark)
> QRG 1802R500KHZ
>
> CALL --- CQ BA CQ BA DE <yourcall> <yourcall> K (one or two rounds
> on the top of the hour suffice --- don't overdo it)
>
> At 0300/0330/0400Z on 7050 call CQ CWIST CQ CWIST if you
> wanna let the lead outten yer sendin' iron, else stand clear.
>
> Officially, everyone is meeting on 7050 at 0200Z, with a QRQ CWist
> fraction meeting at 0300/0330/0400Z on 7050 for CW that pulls the stops
> outta da sendin' iron. This is for the summer rounds. In fall and
> winter and early spring we fall back to 160/80M. The QRQ CWists are
> not all that frequent, so if they are not there the BA types keep on
> going.
>
```

> One of the purposes of this ``roundtable'' (it is not a formal net, but a
> loose roundtable that is most informal, and sort of run by whomever gets
> there first with the most signal heard by all), is to give folks a good
> opportunity to wring out those boatanchors and glowbugs that have been
> sitting on the shelf too long, and put them to use. It is also a good
> place to bone up on your CW, exchange OT radio related info, and if you
> are one of the QRQ section, to rattle an' bang the fire outta that brass
> monkey sittin' on the table.
>
> The reason we use the 3579R545 QRG is because of the availability of TV
> colorburst rocks which just happen to work fairly well in old novice rigs.
> The other QRG's are just what happened to pass. There may be high and
> mighty QRM present from that silisidbandstuff and the rittyrattybingbang
> stuff, but that usually doesn't bother the diehards.
>
> Anything from a 1920's Hartley oscillator to a latemodel 6146 rig, and
> everything in-between is likely to show up, at one time or another,
> WWII surplus, breadboard bottleburners, and all manner of like kind, also.
> Regen receivers and hot R-390's often are used for the RX. Straight
> sendin' irons, bugges, cootie keys, and fancy keyers are used.
>
> So, if you have an interest in actually using that dustbunny ironmonger's
> delight that you treasure as a boatanchor, or that fine little glowbottle
> puffer you put together last weekend, then you might consider joining in
> on the roundtable, sometime.
>
> 73/ZUT DE NA4G/Bob UP
>
> (if someone wants to pass this along to the Boatanchor closed and free lists,
> you have my permission).
>

Date: Tue, 13 May 1997 16:29:06 -0400 (EDT)
From: rdkeys@csemail.cropsci.ncsu.edu
Subject: OK Where are all the GRC-109's at tonight!

Well, with all the GRC-109's newly floating about the group, someone oughtta
fires up a few o' them thar critters tonight and tomorrow night on 3579!

Jus' a'thinkin' out loud.....Bob/NA4G

Date: Tue, 13 May 1997 14:54:15 -0700 (PDT)
From: Ken Gordon <keng@uidaho.edu>
Subject: Re: AN/GRC-109 Arrived

> >Any suggestions on how to handle the audio thing?
>
> I tested my receiver last night with both 2000 ohm cans and a 600 ohm
> military headset. Both worked fine. Not much output into a modern 8 ohm
> headset. I ordered the LS-166 speaker from Fair for my unit; it has a
> 600:8 ohm output transformer. If speaker output is low I may build a
> simple 1-stage audio power amp inside of it.

If you all really think you need more audio gain, there is an AMPLIFIED speaker available from Fair on page 18 of their '96 catalog which might be of interest to you.

I use the LS-166 and it works fine.

Ken W7EKB

Date: Tue, 13 May 1997 19:34:02 -0700 (PDT)

From: JMcAulay <jmc@QNET.COM>

Subject: Battery packs

Jeff reported quite eloquently:

>The manual indicated you could run the receiver
>off a BA-48 dry battery pack. Fair sells good ones for \$14.95 and "weak"
>ones for \$4. I ordered a weak one, solely for the connector on the top of
>the battery. That'll allow me to put together a more compact power supply.

For applications using the 67.5 volt packs, I have occasionally taken apart a battery case (cardboard) very carefully, extricated the guts, clipped off the connector, and stuffed the thing with cheapie 9-volt batteries wired together with a harness made from RatShack snap-connectors. Tape the box back together, and all is well. The case of the 67.5 that fits into the old Nems-Clarke or RCA broadcast-band FI meters will accept seven of the nine-volters without rupturing (and it still fits into the unit), and the alleged 63 volts always worked just fine for me. Lots easier to find "transistor radio" batteries when you're out in the middle of nowhere -- for that matter, in the middle of somewhere, even.

So hey, play do-it-yourself and rebuild battery packs as required.

73

John WA6QPL

Date: Wed, 14 May 1997 09:36:29 -0400 (EDT)

From: rdkeys@csemail.cropsci.ncsu.edu

Subject: Re: OK Where are all the GRC-109's at tonight!

>
> > Well, with all the GRC-109's newly floating about the group, someone oughtta
> > fires up a few o' them thar critters tonight and tomorrow night on 3579!
> >
> > Jus' a'thinkin' out loud.....Bob/NA4G
>
> Hmmmmmm. I better look for a 3579R545 rock.
> Ken W7EKB

Well, last nite we had Conard/WS4S's GRC-109 on a random wire, then he went bigtime with his Angry-19 and then his TCS. Also had Rod/VA3RP in Ontario and Bill/WB0CLD in Missouri aboard. Mebbe we will get some more.....

Date: Wed, 14 May 1997 10:02:03 -0400 (EDT)

From: rdkeys@csemail.cropsci.ncsu.edu

Subject: Re: Hartley

> Thanks, I got the articles along with some others. I was wondering
> exactly what a tub mica cap is. Are they the flat items shown in the
> picture of the transmitter? (I'm still new to this and on my learning
> curve.) Are these 20's technology or are they made today? Do you know
> where I can obtain some? I'm thinking about trying to use PVC pipe for
> the coils.
> Many thanks,
> Chris

I use black PVC for coil forms and it works just fine. The 1-1/2 inch size is quite good generally, and the 2 inch size is good for big rigs. Rarely will you need a larger size. I wind coils with no. 14 or no. 12, or if I can find it easily and cheaply, no. 10 black plastic insulated household wiring wire. It is quite common in no. 14 size, makes good coils, and is relatively cheap (around 20 bucks for a 500 foot roll). For receivers, bell wire (no. 22 guage) makes excellent winding material, on the same type of forms. It is advantageous, for period looks, to lightly buff the coil forms with very fine sand paper or maybe a steel wool sponge to remove the modern lettering, and give it an antique appearance.

Tub micas are transmitting micas about 1x3x2 inches or larger. In the old spark days, they looked like a cast bathtub, hence the name. Later, they were cast in blocks more resembling a block of wood with feet than a bathtub. The ones in the photos are postage stamp micas (so-called because they are a little larger than a postage stamp, and flat like one). The postage stamp micas were used in receivers and smaller transmitters (10 watts and under, usually, depending upon how far you wanted to push the limits). Most are rated around 500/1000/1200/1500/2000v, usually around 1000v on the old ones. Tub micas are usually always good for 2000v or more. These capacitors are usually found as odd items in junk boxes at hamfests. That is where I get most of mine. When I build, I like to add a little bit of tolerance to the ratings of parts, so usually switch bathtubs for postage stamps in transmitters. In receivers, it does not matter. Tub micas have not been made in about 40 years, although modern ceramic versions for broadcast use are still made, but are very expensive. If I had to buy a new one at modern prices, I would think seriously about building one from glass plates and thin aluminum sheet (that works fine too, but is a little larger than the average bathtub mica, these days). Tub micas were used by the bazillions in WWII in almost every kind of transmitter, as were the largest of the postage stamp micas rated at 2000v. All of them are good for generic glowbugging use. They are usually found by digging UNDER the hamfest tables, down deep in the bilges of the nondescript boxes full of the trash sweepings from times long ago. Alas, some of the hi-pressure commercial hamfest types are wont to snap them up and turn a 500%-1000% profit on them, to the unknowing types. As is the common Latin saying.....`caveat emptor'. If you have to pay more than a buck or two for one, you should look elsewhere. Most of mine I get for 25c to a buck each, depending upon size and capacity/voltage ratings.

73/ZUT DE Bob/NA4G UP

Date: Wed, 14 May 1997 08:46:27 -0600 (MDT)
From: Terry Dobler KJ7F <kj7f@micron.net>
Subject: KJ7F BA page updated

Gang,

I have updated my BA page. It has a new URL so if you have linked to it previously, please update your links. I have also added a dozen photos of various rigs. Feel free to stop by and browse.

http://netnow.micron.net/~kj7f/boatanch/ba_page.htm

Terry KJ7F

I'm not going to take the interstate,
It represents all the things I hate.
Neil Diamond

kj7f@micron.net (Boise, Idaho) <http://netnow.micron.net/~kj7f>

Date: Wed, 14 May 1997 12:15:33 -0700
From: "R. Eric Sluder" <sludere@gte.net>
Subject: Phoenix Xtals

Curiosity question - has anyone received their ordered of xtals from John at Phoenix? I dropped John an email yesterday and hadn't heard back yet, which made me wonder if anyone has received their order as of yet?

I'm sure he got swamped with orders at such a great deal. I sent my check back on 4/19 so it's been almost a month.

Just curious and anxious, (got a DX-20 calling my name)

Eric

- - -

~~~~~  
R. Eric Sluder, KB9BGS  
3339 Eden Way  
Carmel, IN 46033-3070 USA  
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End of glowbugs V1 #31

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Created by **Steve Modena, AB4EL**
Comments and suggestions to **modena@SunSITE.unc.edu**
